

Bermuda Triangle

Geographically situated between Florida, Bermuda and British Virgin Islands lies notorious oceanic territory infamous for many aircrafts and ships disappearances. We are not talking about few fisherman boats and civil aeroplanes but military vessels, fighter jets and hundred fifty meter transports. Even nuclear powered submarine went missing in 1968.

First to report mysterious events was Christopher Columbus in 1492. who saw strange lights and had compass problems. This two could indicate magnetic disturbances. Although auroras are common for most distant Northern and Southern regions some phenomenon other than solar wind could be responsible, probably originating underwater and maybe related to Earth`s geomagnetic field.

Puerto Rico Trench is located near. Separating Atlantic Ocean and Caribbean Sea, it is 8.6km deep, 800 km long intersection between adjacent tectonic plates which friction creates regional volcano eruptions, earthquakes and tsunamis.

Nikola Tesla experimented with an alternating current. Produced with generators, characterized by a sine wave, it is transferred through power

lines using towers and transformers creating electromagnetic field along the way. Remember alleged "Philadelphia Experiment"? It happened in 1943. - same year Tesla died under very suspicious circumstances. After he died, FBI seized his property. Moreover, Philadelphia is right next to New York. Is Bermuda triangle testing ground for Tesla`s ideas?

Mythical island Atlantis, mentioned by Plato, supposedly sank. Perhaps it was submerged not sank. Perhaps it was not an island at all. Where did it happen? Oh, in Atlantic Ocean. Well, well. Larger than Libya and Anatolia together? I think it was a mothership.

In 2020. Arecibo observatory crashed due to a cable malfunction. As reported by National Science Foundation, one cable has "unexpectedly detached" and after few months second cable snapped at only 60% of its capacity. Both lines were connected to a same tower. This could easily count as an engineering accident or negligence but location is very interesting - Puerto Rico island in Bermuda Triangle.

According to on-line sources, as counterweight for conspiracy theories, insurance companies do not charge higher rate for going through Bermuda Triangle and statistic doesn`t reveal unusual percentage of accidents when larger traffic volume is taken into account. On contrary, insurance regulations are more favourable than those in USA making companies go offshore.

If we extend an area of concern little further into North Atlantic there we have very well known Titanic shipwreck broken into halves. What kind of accident does that amount of damage? Supposedly Titanic hit an iceberg. What a naive explanation. If that is correct damage would be anterior not lateral. I think something lifted Titanic from below and due to its 269 meters length ship cracked as dry twig. What force can raise such a weight? Giant wave... Or an object moving straight upwards.

In 2023. OceanGate`s Titan submersible (Cyclops 2) went to explore Titanic shipwreck. Several identical dives have already been completed in previous years and, as a result, (cylindrical not round) hull either sustained localized microscopic harm or it was overall fatigued, maybe both. Tremendous underwater pressure did the rest: vessel was compressed in an extreme manner. According to experts, speed of compression is approx. 671 meter / second finishing event in a millisecond time. For comparison, human brain average reaction to stimulus requires 250 milliseconds. Fastest visual processing takes 13 milliseconds. One thousandth of a second? You are dead before you know it.

Boreholes

Planet Earth has three distinctable layers: covering, mantle and core.

Borehole is a drilling attempt to reach Earth`s interior as far as possible. Purpose can be scientific or industrial but I make no difference in this article.

With all drilled boreholes we merely scratched our planet`s surface but we did achieve few ecological crisis like spilling millions of oil barrels into water environment.

Deepest impale went not more than 11km into an oceanic and 13km into a continental crust. To be exact, 10,062 m achieved by BP Deepwater Horizon in Mexico Gulf and 12,289 m done in Qatar by Maersk oil. Other notable attempts belong to Germany (KTB), Japan (Chikyu), Soviet Union (Kola) and Exxon Neftegas (Sakhalin) which is considered to be a longest borehole in the world.

Problem is Earth`s radius lenght of approx. 6,371 km meaning that we have penetrated one third into a crust or just around 0.2% total.

Mohorovičić discontinuity is a boundary discovered by Croatian seismologist Andrija Mohorovičić. This borderline separates different regions of seismic

activity by measuring P- and S-wave velocities. It is located around 8 km under an ocean bottom and 50 km beneath ground surface. Depending on topology and soil composition, exact position varies. Change in speed of seismic waves indicates layer differentiation even making possible to identify fluidity in the core's outer region while middle itself is solid due to a tremendous pressure reaching millions of atmospheres.

Mantle is comprised mostly of a silicate rock accounting for 67% of Earth's mass while core attributes to half of Earth's radius.

Geothermal gradient is $25^{\circ}\text{C} / \text{km}$. In core, temperature reaches that of a star photosphere - over five (5) thousand degrees heat.

I have underlined statement about geothermal gradient, found on a various on-line sources, because it is illogical. It would mean that temperature in Earth's core surpasses fifty (50) not five (5) thousand degrees. Simple math: 25×3185.5 (if we use half of Earth's radius or $6371/2$) = 79,637.5. Result doubles if we use full radius. This is exactly why I say that Internet is 99% untrustworthy. Geothermal gradient seems to be $1\text{-}2^{\circ}\text{C}$ per km. That makes sense.

Regarding chemical composition, covering and mantle are mineral abound

while nucleus has mainly Iron and Nickel with addition of Gold, Platinum, Cobalt and Sulphur.

Magnetic field originates in core's outer segment where boiling metal stirs and circles around middle creating very strong electric current resulting in a natural geodynamo effect. Unlike Mars, Venus and Jupiter which lack some of crucial components (rotation, fluid interior able to conduct electrical power and/or reliable energy supply driving a convection).

Earth's rotating speed is approx. 1770 km/h. Why does it spin? One plausible explanation is that Sun gravity moves covering and mantle around much heavier, static core.

Another way of studying Earth's interior is by detecting particles called "geoneutrinos" which are products of radioactive decay.

Crystal skulls

Made of quartz, silicon mineral (SiO_2), most of crystal skulls are purely decorative items, unlike the one used in Indiana Jones movie, and their origin appears to be not Mesoamerican but European, not ancient but 19th century as discovered with an aid of electron microscope and X-rays.

However, it is hard to believe that an idea itself originated in Europe. Indeed, when you look at Mayan and Aztec art there is a notable portion considered with human and animal anatomy, sometimes mixed, often portraying cranium alone. At famous historical site Chichen Itza, in today's Mexico, there is a display of carved skulls. Other archeological findings include real exhibits which practice started earlier by cultures like Toltecs who adored deity called "the Feathered Serpent", Quetzalcoatl.

Spanish invaders introduced biological warfare. They used variola virus to spread deadly smallpox disease among natives. My empathy is partial since, priorly, affected civilizations tore beating hearts out of a living victims, cut off and staked their heads afterwards (literally) during ceremonial rites which, supposedly, pleased Gods. I bet Gods had a good laugh watching idiots down here on Earth. Then and now same thing repeats - only technologically advanced. Knives are replaced with bullets, pathogens are modified. Uniting string through entire course of human history is... People suffer.

Non-crystalline form of quartz is glass which has longer disintegration time than aluminum, plastic and rubber. Can starts breaking down after 100, PET bottle after 500, PVC bag after 1000, car tyre after 2000 - glass bottle after 1 million years! Substances such as these are called xenobiotics (foreign to

life) because synthetically produced they lack natural auto-removal mechanism like found in living creatures. Humans, for example, have enzymes that start biodegradation process very soon post-mortem. Autolysis is followed by putrefaction and bloating phase, then soft tissue liquefies and finally naked skeleton is all that remain.

Protein in bones (collagen), hair and nails (keratin) binds with minerals making durable structure. Yet oldest human remains found in Ethiopia date back 3-4 million years meaning that with time skeleton decomposes too. Otherwise, soil would contain significantly larger amount of bones. Teeth are much less resistant already starting to decay during our lives mainly due to an acidic exposure of sort.

Natural deterioration factors are bacteria, fungi and earthworms recycling limited matter over and over again.

Xenobiotics like carcinogens, pollutants, additives and pesticides are highly toxic, accumulate in environment. Every year mankind produces 300 million tones of plastic. Seas are covered with our garbage, animal and plant organisms horrifically die.

Scientists have discovered bacteria *Ideonella sakaiensis* which "eats" plastic.

Obviously, Nature eventually finds a way. If nothing else, UV light fully serves its purpose. Also, xenobiotics have become collectable and new, disposable materials are being developed.

Radioactive decay time in which $1/2$ of a substance disintegrates is called an isotope's half-life. Unstable ones have very short half-life, just few milliseconds, while stable can last billions of years. Some elements are present from an earliest stages of the Big Bang. They are called primordial nuclides.

In 1967., Andrei Sakharov postulated a proton decay hypothesis suggesting that proton breaks down into a simpler particles. Although never experimentally observed, it is predicted to be at the 10^{-34} scale.

I think glass durability explains why silicon dioxide was material selected to craft skulls.

Another essential criteria was ability to resonate. Due to its crystal structure quartz acts as an oscillatory dynamical system. Together with piezoelectric properties it can communicate with surroundings. This kind of devices are able to store and reproduce sounds in high fidelity. I don't think they can really enhance individual's psychic power but working as a "mind" extension

they can help to better channelize thoughts and retrieve data priorly deposited within a skull.

If authentic Mesoamerican, even knowledge from long lost civilizations.

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